

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>STATIONARY SOURCE COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 6	PAGE 1
	APPL. NO. <u>496048, 50</u>	DATE 3/10/2009
	PROCESSED BY LI CHEN	CHECKED BY

PERMIT TO OPERATE

COMPANY NAME AND ADDRESS

INLAND EMPIRE ENERGY CENTER, LLC (IEEC)
P. O. BOX 1240
Romoland, CA 92585
SCAQMD ID #129816

Contact: Francisco Escobedo, (925) 928-6905

EQUIPMENT LOCATION

INLAND EMPIRE ENERGY CENTER, LLC (IEEC)
26226 Antelope Road
Romoland, CA 92585

EQUIPMENT DESCRIPTION

Section D of the facility permit: Permit to Construct and temporary Permit to Operate

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
PROCESS 1: COMBUSTION AND POWER GENERATION					
SYSTEM 2: AUXILIARY EQUIPMENT					
IC ENGINE, EMERGENCY #1, DIESEL, CATERPILLAR, MODEL G3516BDITA, 2,848 HP, WITH PERMIT FILTER, WITH: A/N: 439494 , <u>496048</u> GENERATOR: 2,000 KW	D9		NOx: PROCESS UNIT	NOx: 6.2 G/BHP-HR (4) [RULE 2005, RULE 1703]; NOx: 270 LB/1000 GAL (1) [RULE 2012]; CO: 0.045 G/BHP-HR (4) [RULE 1303]; VOC: 0.03 G/BHP-HR (4) [RULE 1303] PM10: 0.015 G/BHP-HR (4) [RULE 1303]	<u>C1.1</u> , D12.4, D12.5, K67.2, E193.1, E193.3, <u>I296.4</u>

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
IC ENGINE, EMERGENCY #2, DIESEL, CATERPILLAR, MODEL G3516BDITA, 2,848 HP, WITH PERMIT FILTER, WITH: A/N: 439495, 496050 GENERATOR: 2,000 KW	D10		NOx: PROCESS UNIT	NOx: 6.2 G/BHP-HR (4) [RULE 2005, RULE 1703]; NOx: 270 LB/1000 GAL (1) [RULE 2012]; CO: 0.045 G/BHP-HR (4) [RULE 1303]; VOC: 0.03 G/BHP-HR (4) [RULE 1303] PM10: 0.015 G/BHP-HR (4) [RULE 1303]	<u>C1.1</u> , D12.4, D12.5, K67.2, E193.1, E193.3, <u>I296.4</u>

BACKGROUND

The Inland Empire Energy Center (IEEC) is a new power plant located in Romoland, CA. It consists of two combined cycle GE H-type gas turbine generators with a total generation capacity of 810 MW. The District issued a permit to construct (P/C) first on August 5, 2005, and a revised permit to construct on April 22, 2006. The permit to construct has been extended to August 5, 2008. The power plant construction is now near completion. It has achieved first fire of the turbine generators in 2008. It is in process of commissioning the turbine generators.

IEEC submitted the following applications to change the emergency IC engine generators conditions.

Applications	Purpose
A/N496048	Emergency IC engine #1 (D9) change of conditions
A/N496050	Emergency IC engine #2 (D10) change of conditions
A/N496051	Title V/RECLAIM facility permit minor modification

IEEC initially proposed to limit the annual operating hours of each engine to 50 hours, consistent with the 50 hours limit for annual maintenance and testing allowed by the CARB's IC engine Air Toxic Control Measure (ACTM). The permit condition C1.1 limits the engine to operate for 50 hours per year. IEEC contends now, each engine should be allowed to operate up to 200 hours per years for emergency operations, as allowed in Rule 1304 for emergency engines. The 50 hours limit was intended for non-emergency operation. IEEC now requests the District to amend condition C1.1 to allow up to 200 hours of emergency operation.

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As a part of proposed change the annual NOx RTC requirement for the engines has to been increased. Condition I296.4 requires the facility to hold 1, 946 lbs of RTC for each engine. The amount of RTC was calculated based on operation of 50 hours per year. Consequently the increase of hours to 200 would result a four-fold increase of RTC requirement. Condition I296.4 will be amended to require 7,784 lbs of NOx RTC.

The applications were received on March 5, 2009. The applications were deemed complete on March 10, 2009. The proposed modification is a minor permit revision.

Both engines are listed in Section H. The permits to construct were issued in August 2005. As the IC engines have been constructed and been operational they should be issued a permit to operate and be moved to Section D of the permit.

IEEC is a Title V facility. It also participates in the NOx RECLAIM program.

EMISSIONS

Even though the emergency IC engines could potentially operate up to 200 hours during an emergency the potential to emit (PTE) will still be based on 50 hours of annual maintenance and testing. There are no increases of PTE.

EVALUATION

RULE 212 – STANDARDS FOR APPROVING PERMITS

Public notification is not required since there are no emission increases.

RULE 401 – VISIBLE EMISSIONS

Visible emissions are not expected from operation of the ammonia storage tanks.

RULE 402 – NUISANCE

Normal operation of this equipment is not expected to cause nuisance problems.

REGULATION XIII – NEW SOURCE REVIEW

There are no emission increases. New source review is not triggered.

RULE 1401 – CARCINOGENIC AIR CONTAMINANTS

Emergency IC engines are exempted from the requirements of this regulation.

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RULE XVII- PREVENTION OF SIGNIFICANT DETERIORATION (PSD)

As there are no emission increases PSD analysis is not required.

REGULATION XXX – TITLE V

The subject facility will be subject to Title V requirements because the potential to emit for VOC, NOx, CO and PM10 will exceed the thresholds specified in Rule 3001. The proposed change is considered a minor change to the Title V permit. A proposed permit revision will be prepared for this project. In accordance with Title V requirements, a copy of the proposed permit revision and analysis will be provided to the facility and to EPA for review. The final permit will be issued at the conclusion of the EPA 45-day review period as specified in Rule 3005(c)(2)(B)(ii).

California Environment Quality Act (CEQA)

The proposed change of condition will not have any impact to the facility's CEQA conformance.

RECOMMENDATION

Based on the above engineering evaluation the District has reached a determination that this facility is expected to achieve compliance with all applicable rules and regulations. The final Title V permit issuance is contingent upon EPA review and approval. It is therefore recommended that the AQMD issue a Permit to Construct. The equipment shall be included in the Section H of the facility permit, subject to the following conditions.

CONDITIONS

C1.1 The operator shall limit the operating time to no more than ~~50~~ 200 hours in any one year.

The 200 hours annual limit includes no more than 50 hours in any one year for maintenance and testing purposes.

[Rule 1110.2, Rule 1304-Exemptions, Rule 1470, Rule 2012]

[Devices subject to this condition: D9, D10, D32]

D12.4 The operator shall install and maintain a non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[Rule 1110.2, Rule 1304-Exemptions, Rule 1303(b)-Offset, Rule 2012]

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[Devices subject to this condition: D9, D10, D32]

D12.5 The operator shall install and maintain a non-resettable elapsed fuel meter to accurately indicate the engine fuel consumption.

[Rule 1110.2, Rule 1304-Exemptions, Rule 2012]

[Devices subject to this condition: D9, D10, D32]

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameters or items.

Date of operation, the elapsed time, in hours, and the reason for operation.

Records shall be kept and maintained on file for a minimum of two years and made available to district personnel upon request.

[Rule 1110.2, Rule 1304-Exemptions]

[Devices subject to this condition: D9, D10, D32]

E193.1 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In accordance with all mitigation measures stipulated in the Final Energy Commission Decision for 01-AFC-17 project and its Amendment 1.

[CEQA]

[Devices subject to this condition: D1, D2, D3, D7, D8, D9, D10, D32]

E193.3 The equipment is subject to the applicable requirements of the following rules or regulations:

Within 6 months of permit issuance, the facility will sign a Memorandum of Understanding with the U.S. Forest Service to participate in a visibility monitoring project, the results of which will be used to establish a visibility baseline in nearby Class 1 Areas.

[Rule 1703 - PSD]

[Device subject to this condition: D1, D2, D3, C4, C5, C6, D7, D8, D9, D10, D32]

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- I296.4 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

~~To comply with this condition, the operator shall prior to the 1st compliance year hold a minimum NO_x RTCs of 1,946 lbs. This condition shall apply during the 1st 12 months of operation.~~

To comply with this condition, the operator shall, prior to the beginning of each ~~all~~ years subsequent to the 1st compliance year, hold a minimum NO_x RTCs of 1,946 7,784 lbs. In accordance with Rule 2005(f), unused RTC's may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year. ~~inclusive of the 1st compliance year.~~

[Rule 2005 – Offsets]

[Devices subject to this condition: D9, D10]